#### STATE OF SOUTH DAKOTA CLASS SPECIFICATION

Class Title: Transportation Technician Class Code: 40406

# A. Purpose:

Inspects and records construction activities, serves as a survey or drill crew member, collects and prepares material samples for testing, and tests materials, to provide technical support for construction projects.

## **B.** Distinguishing Feature:

The <u>Transportation Technician</u> is a training position and duties are assigned and performed under direct supervision.

The <u>Journey Transportation Technician</u> performs assigned tasks within established procedures; and the impact of decisions they make on duties they perform contributes to services used by others in making decisions.

#### C. Functions:

(These are examples only; any one position may not include all of the listed examples nor do the listed examples include all functions which may be found in positions of this class.)

- 1. Records quantities by measuring, inspecting, and documenting basic construction activities such as clearing and grubbing, crack-sealing, riprapping, painting, marking pavement, and others to provide supporting data for contractors' payments.
- Measures and calculates quantities and application rates of various materials and signs weight tickets to ensure proper placement, compliance with specifications, and documentation of quantities.
- 3. Works as rod man, chain man, instrument man, or stake-setter on a survey crew to secure data for preliminary surveys and to implement construction surveys.
- 4. Assembles, disassembles, and maintains drill rigs and operates and maintains associated equipment to provide support to a drilling crew.
- 5. Prepares material for testing to assist in determining compliance with specifications and standards.
  - a. Splits and washes samples.
  - b. Weighs sieve materials.
  - c. Casts concrete cylinders.
  - d. Tests materials.
- 6. Maintains daily diaries and completes required paper work to ensure documentation of work activities.
- 7. Performs other work as assigned.

# D. Reporting Relationships:

Reports to a supervisory engineer. Does not supervise.

#### E. Challenges and Problems:

Challenged to learn the application of department standards related to highway construction. This is difficult because of the variety and technical nature of the standards.

Problems include meeting testing deadlines and dealing with equipment malfunctions.

## F. Decision-making Authority:

Decides if samples are adequate, when to refer problems to the supervisor, whether or not materials meet specifications, and if testing apparatus is properly calibrated.

Decisions referred include when to stop contractors' work, when to refuse materials, and conflicts between construction plans and project site.

## G. Contact with Others:

Daily contact with contractors' employees while performing inspections, with field or laboratory personnel to obtain training on sampling and testing, with surveyors and drillers to participate in training.

## H. Working Conditions:

Works in a typical office environment, in the field, or in a laboratory, and is exposed to a variety of weather and environmental conditions, hazardous materials, heavy equipment, high-volume traffic, and physical stress from lifting.

#### I. Knowledge, Skills, and Abilities:

Knowledge of:

- basic mathematics such as addition, subtraction, multiplication, division, and calculating percentages and fractions;
- record keeping such as recording numbers in a daily journal, and recording pertinent daily events;
- weights and measures;
- safety practices such as safe lifting techniques, and working around traffic and construction equipment and in extreme weather.

#### Ability to:

- lift as much as 70 pounds routinely;
- read and comprehend written instructions such as material testing manuals;
- follow oral instructions;
- follow standard procedures to an established end result;
- analyze material test results and determine whether they fall within a set range;
- determine when to refer a decision to a higher authority;
- work outdoors for long periods of time in extreme weather conditions;
- learn to use and maintain specialized testing, surveying, and drilling equipment;
- spell correctly and write legibly;
- · communicate with coworkers.